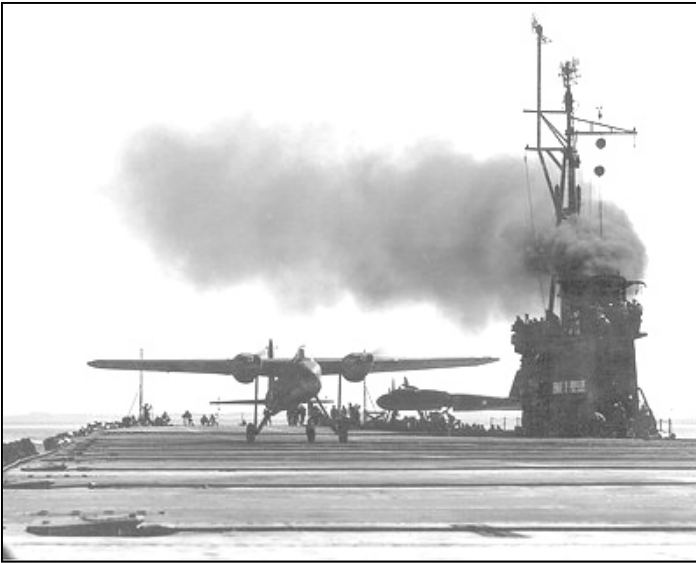


The Forecastle Report, May 2009

TDN1-1

By Bob Filipowski

In the last few years there has been an increased interest in the paddlewheel aircraft carriers, USS *Sable* and USS *Wolverine* that operated out of Chicago during WWII. Although not combat vessels, their unique design and contributions to winning the war have made them a natural for modern model warship enthusiasts. Rumors have it that a book featuring these vessels is in the works, which would certainly be a welcomed edition to many libraries.



I recently came across a photo of the USS *Sable* with two rather strange aircraft on the flight deck. The caption read: "TDN1-1 landing aboard the USS *Sable*." I've always had an interest in WWII aircraft, and this one had me stumped. The light tricycle landing gear and small engines suggested that it was not a combat fighter or bomber, and yet it had some considerable size to it. So, what were they?

After not having any success on my own, I contacted a number of Shipwright members for their opinions. John Mitchell suggested that the designation "TDN" might stand for Target Drone Navy, but we both agreed that these planes were much too large to be expended for target practice. Tim Riggs would eventually point us in the right direction, and confirm that John was correct. These were indeed drones, but providing gunnery practice for navy gun crews was not their intended function.

Believe it or not, the first pilotless drone flew in 1936. Over the years, they would vary in size from an overgrown model airplane, which was used for gunnery practice, to the purpose built twin engine TDN1-1. An example of almost every aircraft in the United States arsenal was retrofitted for test purposes at one point or another.

During WWII, guidance systems were still in their infancy

so drones had to be controlled from the ground, from ships or by mother-planes called "Queens". In the photo at the right, an F6F Hellcat drone is piloted by a Queen. The second mother-plane was supposedly there if something went wrong.



The TDN1-1 was a plywood built aircraft developed by the Naval Aircraft Factory and was actually an assault drone that was capable of carrying a 2000 lb bomb! One website states that they were deployed to the Pacific, and used against the Japanese. There was no mention of how successful they were.

Since the Pacific war was primarily a naval war, the presence of two of these aircraft aboard the *Sable* can be explained. It would seem that at least the USS *Sable* was being used for more than pilot qualifications. The training of crews to

service and arm these drones would have been necessary, not to mention the need for ex-



perienced mother-plane pilots.

If you look closely, there are some other aspects of our "mystery" photo that aren't as easily explained. The caption stated that the TDN1-1 was landing. Notice that there are crewmen standing on the flight deck in the background. It's highly doubtful that anyone would have been standing there while a plane was landing—especially a drone! It's more likely that the plane was taking off.

Both the *Sable* and *Wolverine* had their islands on the starboard side. That being the case,



this presents another oddity in the photo. The drone is actually heading toward the stern. Note the arresting cables in the foreground, and the smoke from the stack trailing forward, which would suggest the carrier was steaming in reverse or at a dead stop. The rationale may have had something to do with the location of the *Sable*'s island, which was pretty far forward. They probably wanted to give these pilotless aircraft as much room as possible!